

REMARKS

In the above-identified Office Action the Examiner has rejected claims 1 and 2 as unpatentable over Kling et al in view of Kumar et al. and further in view of Grace et al. The Examiner has concluded that it would have been obvious that calixarene derivatives can be used to buy integrin .alpha..sub.v.beta..sub.3 to a substrate such as a substrate disclosed by Kling et al. and would have reasonable expectations of success in using derivatives to bind the integrin since Grace et al. teaches calixarene can be functionalized as required.

Applicant disagrees. Applicant has amended the claims so that it now recites that the chip has a surface coated with a mono-layer of a bi-functional molecular linking means. The cited art does not teach such a mono-layer. Accordingly, it would not be obvious to utilize such a coated surface. Further, Applicant notes that the Examiner has stated that the 96-well plate is considered to be equivalent to a protein chip since there was no definition in the specification nor was such a equivalency excluded. Applicant notes that the definition of a protein chip is well known to one skilled in the art and, as known, does in fact exclude a 96-well plate. Accordingly, the disclosure of Kumar et al. cannot be utilized in determination of obviousness of the subject invention.

More particularly, a protein cell is, generally speaking, a glass slide on which different molecules of proteins have been affixed at separate locations in an ordered manner thus forming a microscopic array. The 96-well plate is entirely different, comprising a flat plate with multiple wells used as small test tubes. In general, the 96-well plate is plastic, thus the support for the testing to be done is different and thus there are significant differences in the manner in which the substance being tested might react with such support. As a result, one skilled in the art would not consider a 96-well plate to be equivalent to a protein chip and, therefore, the teachings of Kumar et al. cannot be utilized in a determination of obviousness as set forth above.

In addition to the above, Applicant notes that the calixarene as taught in Grace et al. is itself used to detect target molecules or substances by using the cavity of the calixarene itself. On the other hand, when using a mono-layer of a bi-functional molecular linking means, as now recited in the claims, the cavity of the calixarene is not used but rather the lower part of the mono-layer of a bi-functional molecular linking means is substituted by the crown ring and the crown ring detects the target of substances or molecules. Thus, the mechanism for detection of the sought after substance or molecule is different. The mechanism being different, one skilled in the art would not think that the teachings of Grace et al. could be combined with Kling et al. and Kumar et al. to arrive at the subject invention.

Figure 1)

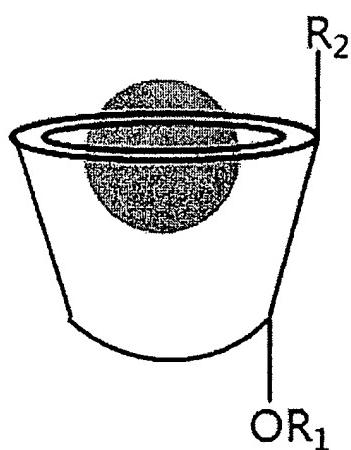
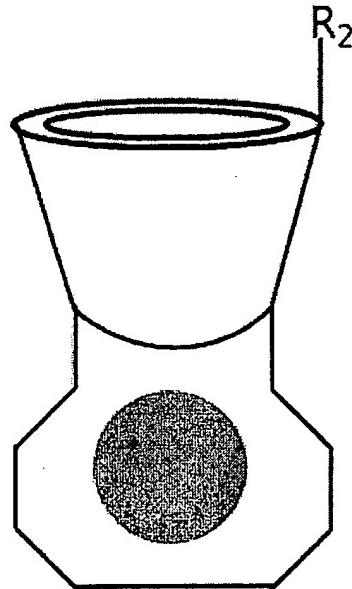


Figure 2)



Applicant hereby requests reconsideration and reexamination thereof.

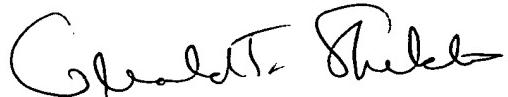
No further fee or petition is believed to be necessary. However, should any further fee be needed, please charge our Deposit Account No. 23-0920, and deem this paper to be the required petition.

US 10/566,532

With the above amendments and remarks, this application is considered ready for allowance and applicant earnestly solicits an early notice of same. Should the Examiner be of the opinion that a telephone conference would expedite prosecution of the subject application, she is respectfully requested to call the undersigned at the below listed number.

US 10/566,532

Respectfully submitted,



Dated: 3 November 2008

Gerald T Shekleton
Reg. No. 27,466
Husch Blackwell Sanders Welsh & Katz
120 South Riverside Plaza, 22nd Floor
Chicago, Illinois 60606
Phone: (312) 655-1511
Fax: (312) 655-1501